AMERICAN DYNAMICS

DigiMux™

THE DIGITAL SURVEILLANCE SOLUTION

The DigiMux™ Digital Surveillance System includes a multi-channel Digital Video Recorder (DVR) with 4, 9, or 16 camera inputs, DigiClient™ remote viewing and configuration software, and one DigiRemote™ infrared remote control. This is a multifaceted product that integrates key elements into a single security CCTV solution. The DigiMux DG4000 series' triplex operation enables users to view live and previously recorded video simultaneously while continuing to record at the same time. It essentially combines the features of two time-lapse audio/video recorders, a multiplexer, and a video server into a single integrated digital platform.

DigiMux converts analog video signals into digital video images that can be stored on an array of hard disk drives. A key advantage to digital video is that it can be indexed by time or events, and recorded video can be instantly viewed. DigiMux users can access recorded video instantaneously without having to rewind videotapes. At the touch of a button, you can fast forward, rewind, and pause, while avoiding image streaking or tearing that is common with analog VCR technology.

DigiMux can be remotely controlled with DigiClient via Ethernet connection to a LAN, WAN or the Internet. The DigiRemote provides control of DigiMux with its fully functional Infrared (IR) remote control that also includes dome control. Three USB ports enable video export to external devices, and two IEEE-1394 (FireWire®) ports enables external storage expansion with Extended Storage Modules (ESM).

DigiMux offers advanced features not typically found in standard multiplexers, including motion detection, remote alarm notification, remote access, and real-time Active Window. The DigiClient remote viewing and configuration software extends the features, accessibility, and usability of the DigiMux. All around, the DigiMux is a full-featured integrated DVR, multiplexer and video server all in one unit.

FEATURES

- Integrated digital video recorder, multiplexer and video server (available in 4, 9, or 16 channel versions)
- Triplex operation enables users to view live and previously recorded video simultaneously while continuing to record at the same time
- Outstanding picture quality with resolutions up to 720 x 480 (NTSC), 720 x 576 (PAL)
- Records up to 60 ips and displays live video up to 90 ips (NTSC) using the Active Window feature
- Record and playback one channel of audio
- Flexible internal storage configurations include: 80, 160 and 320 GB
- Various on-line storage options including up to 1.6 TB (TeraBytes) via FireWire using Extended Storage Modules
- Off-line storage options include USB 1.1 and 2.0 devices such as hard drives, ThumbDrives® and CD-RW
- Networkable via Ethernet (TCP/IP)
- Easy-to-use DigiClient browser-based remote viewing and configuration software enables access to live and previously recorded video
- Covert camera operation provides enhanced security and administrator control

- Motion detection with configurable sensitivity levels
- Remote alarm notification via DigiClient software, e-mail, pager or phone
- Pre-alarm video (up to five minutes)
- Upgrade software via the Internet or USB ThumbDrive (available separately)
- Easy configuration feature enables quick setup of record options using extended, standard or best quality
- Cascade (daisy-chain) up to 10 DigiMux's to create a scalable system
- DigiRemote fully functional Infrared (IR) control includes dome control
- Extend control of DigiMux via ControlCenter™ 200 or 300 keyboards (available separately)
- Export video and associated audio via USB, LAN, or FireWire
- Digital signature verifies authenticity of video
- Integrated dome control supporting a variety of domes, including the SpeedDome® series
- Per camera settings for covert camera feature, termination, gain control, alarms, motion detection, day/night/weekend scheduler

SPECIFICATIONS

Model Numbers

NOTE: Substitute "P" for "N" for PAL version.

ADDG4004080N . . . . .DigiMux, 4 channel, with DigiClient software, 80 GB, NTSC

ADDG4004160N . . . . .DigiMux, 4 channel, with DigiClient software, 160 GB, NTSC

ADDG4004320N . . . . .DigiMux, 4 channel, with DigiClient software, 320 GB, NTSC

ADDG4009080N . . . . .DigiMux, 9 channel, with DigiClient software, 80 GB, NTSC

ADDG4009160N . . . . .DigiMux, 9 channel, with DigiClient software, 160 GB, NTSC

ADDG4009320N . . . . .DigiMux, 9 channel, with DigiClient software, 320 GB, NTSC

ADDG4016080N . . . . .DigiMux, 16 channel, with DigiClient software, 80 GB, NTSC

ADDG4016160N . . . . .DigiMux, 16 channel, with DigiClient software, 160 GB, NTSC

ADDG4016320N . . . . .DigiMux, 16 channel, with DigiClient software, 320 GB, NTSC

General

Access Protection . . . . .Yes

Alarm Event Display . . . . .Yes

Motion Alarm Generation . . . . .Yes

Alarm Notification . . . . .Yes, via DigiClient software, pager or phone (requires Caller ID function)

Pre-Alarm Images . . . . .Yes, up to 5 minutes per camera

Camera Auto Detect . . . . .Yes

Search Options . . . . .Yes (event, camera, time and date)

Network Connectivity . . . . .10/100 Mbps Ethernet (TCP/IP) or external PSTN modem

Dome Control Protocols . . . . . . .AD422, Pelco P and Pelco D

Domes Supported . . . . .American Dynamics SpeedDome Series and others

Dome Control . . . . .Yes, built-in control via front panel controls, DigiClient software, DigiRemote or ControlCenter 200 and 300 keyboards

Keyboard Interface . . . . .Compatible with ControlCenter 200 and 300 keyboards (available separately)

IR Sensor/Remote Control . . . .Includes a DigiRemote control and works with universal infrared TV/VCR remote controls

Network Transmission Speed . .Maximum 25 ips/Ethernet

Export Picture or Video Clip . . .Yes, via USB devices such as CD-RW or ThumbDrive

Processor .Multimedia digital signal processor

Operating System . . . . .Embedded

Languages . . . . .English, French, German, Italian and Spanish

Video

Signal Format . . . . .NTSC or PAL (internal switch)

Video Inputs . . . . .4, 9 or 16 looping composite inputs (1 Vp-p, 75 Ω with individual software termination)

Monitor Outputs . . . . .Two composite outputs (1 Vp-p, 75 Ω), One S-video output

Video Display Resolution . . . . .720 x 480 (NTSC), 720 x 576 (PAL)

Record Resolution . . . . .720 x 240 (NTSC), 720 x 288 (PAL)

Playback/Record Speed . . . . . . .Up to 60 ips (NTSC), 50 ips (PAL)

Live Video Refresh . . . . .Live video displayed up to 90 ips (NTSC), 75 ips (PAL) including Active Window

Active Window . . . . .User-selectable window (or cameo) that displays real time video of one camera input up to 30 ips (NTSC), 25 ips (PAL)

Display Options . . . . .Full, 2x2, 3x3, 4x4, PIP, sequence

Video Encryption . . . . .Digital signature on video export

Alarm

Alarm Input . . . . .4, 9, 16 TTL compatible, (via I/O connector board, included)

Alarm Output . . . . .Three dry contacts (via I/O connector board, included)

Alarm Reset Input . . . . .One TTL compatible (via I/O connector board, included)

Audio

Audio Sampling Rate . . . . .8 kHz

Audio Input . . . . .One line in, unbalanced high impedance

Audio Output . . . . .One line out, unbalanced high impedance

Front Panel Controls

Camera Buttons . . . . .DG4004 Model: 1 to 4
DG4009 Model: 1 to 9
DG4016 Model: 1 to 16

Dome Control Buttons . . . . . . .Pan, tilt, zoom in, zoom out, focus in, focus out, set presets, go presets

Video Viewing Buttons . . . . .Fast rewind, rewind, play, pause, forward, fast forward, sequence, mode

Directional Buttons . . . . .Up, down, left and right arrows

Control Buttons . . . . .Enter, escape, lock

Front Panel Indicators

Camera and Control Buttons . .Active buttons indicated via back light

Power On . . . . .Indicates power is "on" (green light)

Record . . . . .Indicates data is being recorded (green light)

Alarm . . . . .Indicates an alarm has been triggered and not cleared (flashing red light)

Network .Indicates network access (steady green light, flashing green light indicates network traffic)

Front Connectors

USB Port .One USB connector port

Rear Indicators

Network . . . . .Standard network "on" indicator beside Ethernet port

Rear Connectors

Video Input . . . . .4, 9 or 16 BNC (composite)
Video Output Loop . . . . .4, 9 or 16 BNC (composite)
Main Monitor Output . . . . .One BNC (composite), one S-video
Call Monitor Output . . . . .One BNC (composite)
Audio In . . . . .RCA connector
Audio Out . . . . .RCA connector
Alarm . . . . .Alarm input per channel with appropriate grounds and outputs
I/O Connector Board . . . . .Quick connect 44-pin I/O connector board for easy alarm and dome control connections (included)
Ethernet Port . . . . .One RJ-45 LAN port
USB Port .Two USB connector ports
IEEE-1394 (FireWire) . . . . .Two IEEE-1394 (FireWire) ports (for additional external storage)
Power Input . . . . .DC Jack, 2.5 mm

Storage

Primary Internal Storage . . . . . .EIDE hard disk drive
Secondary Internal Storage . . . .EIDE hard disk drive
External Storage . . . . .IEEE-1394 (FireWire) - max two ESMs
Export . . . . .USB 1.1 and 2.0 (on front and back of unit)

Electrical

Power . . . . .External auto-ranging power supply, 100 to 240 VAC, 500 mA, 50/60 Hz, input power DC 19 V, 3.4 A

Mechanical

Dimensions (W x H x D) . . . . . .432 x 44 x 406 mm (17 x 1.75 x 16 in) Rack-mountable, one RU
Shipping Dimensions . . . . .533 x 305 x 508 mm (21 x 12 x 20 in)
Unit Weight . . . . .5.4 kg (14 lbs)
Shipping weight . . . . .9 kg (20 lbs)
Color . . . . .Black
Case . . . . .Desktop (with removable non-marring feet)
Rack-Mount Option . . . . .Front rack-mount ears included with DigiMux

Minimum Systems Requirements for DigiClient Software

Operating System . . . . .Windows XP, Windows 2000 or Windows 98 SE
Processor .Pentium III, 600 MHz or faster
Memory . . . . .128 MB RAM
Screen Resolution . . . . .SVGA, 800 x 600 pixels, 16 bit or higher
Connectivity . . . . .10BaseT or 100BaseTX or dial-up (56 K) modem
Web-Browser . . . . .Microsoft® Internet Explorer 6.0 or higher
Peripherals . . . . .CD-ROM or CD/RW drive (optional), mouse, keyboard

DigiRemote

Functions .Menu, enter, escape, play, pause, rewind, forward, 1 to 16 camera/channel selection, up, down, left, right directional controls, set, sequence, mode, lock and dome control
IR Distance . . . . .12 ft (4 m)
Battery Type . . . . .Two "AA" 1.5 V, included
Size . . . . .Approximately 2 x 7 x .75 in
Weight . . . . .Approximately 8 oz

Regulatory

Emissions .FCC Part 15, Subpart B, Class A
Safety . . . . .UL and CUL 1950
CE

Environmental

Operating Temperature . . . . .5° to 40° C (41° to 104° F)
Storage Temperature . . . .-20° to 70° C (-4° to 158° F)
Humidity . . . . .0% to 90% RH (non condensing)

Accessories

ADCC0200 . . . . .ControlCenter Keyboard, two axis joystick, RS-485
ADCC0300 . . . . .ControlCenter Keyboard, three axis joystick (twist and zoom), RS-485
ADCCACPSN . . . . .ControlCenter Keyboard Accessory, Power Supply & Interface kit, 120 VAC
ADCCACPSP . . . . .ControlCenter Keyboard Accessory, Power Supply & Interface kit, 230 VAC
ADACTD01128U . . . . .USB ThumbDrive Smart 128 MB
ADDGRC20 . . . . .DigiRemote IR Remote Control
ESM480 . . . . .480 GB Extended Storage Module
ESM640 . . . . .640 GB Extended Storage Module

BASIC SYSTEM DIAGRAM
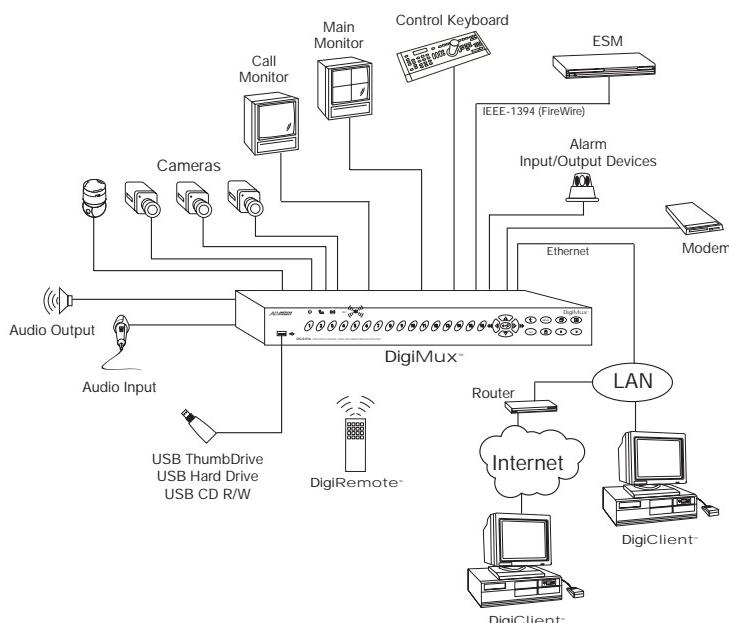
Record Duration Times (NTSC without audio)

80 GB

Image Rec Recording Rate		Recording Picture Quality Mode									
		BASIC 10 KB		STANDARD 12 KB		MEDIUM 15 KB		HIGH 19 KB		SUPERIOR 28 KB	
(sec/imag)	(imag/sec)	Hours	Days	Hours	Days	Hours	Days	Hours	Days	Hours	Days
0.02	60	37.0	1.5	30.9	1.3	25.0	1.0	19.8	0.8	13.4	0.6
0.03	30	74.1	3.1	61.7	2.6	50.1	2.1	39.6	1.7	26.7	1.1
0.10	10	222.2	9.3	185.2	7.7	150.2	6.3	118.8	5.0	80.2	3.3
0.20	5	444.4	18.5	370.4	15.4	300.3	12.5	237.7	9.9	160.4	6.7
0.33	3	740.7	30.9	617.3	25.7	500.5	20.9	396.1	16.5	267.4	11.1
0.50	2	1,111.1	46.3	925.9	38.6	750.8	31.3	594.2	24.8	401.1	16.7
1.00	1	2,222.2	92.6	1,851.9	77.2	1,501.5	62.6	1,188.4	49.5	802.2	33.4

160 GB

Image Rec Recording Rate		Recording Picture Quality Mode									
		BASIC 10 KB		STANDARD 12 KB		MEDIUM 15 KB		HIGH 19 KB		SUPERIOR 28 KB	
(sec/imag)	(imag/sec)	Hours	Days	Hours	Days	Hours	Days	Hours	Days	Hours	Days
0.02	60	74.1	3.1	61.7	2.6	50.1	2.1	39.6	1.7	26.7	1.1
0.03	30	148.1	6.2	123.5	5.1	100.1	4.2	79.2	3.3	53.5	2.2
0.10	10	444.4	18.5	370.4	15.4	300.3	12.5	237.7	9.9	160.4	6.7
0.20	5	888.9	37.0	740.7	30.9	600.6	25.0	475.3	19.8	320.9	13.4
0.33	3	1,481.5	61.7	1,234.6	51.4	1,001.0	41.7	792.2	33.0	534.8	22.3
0.50	2	2,222.2	92.6	1,851.9	77.2	1,501.5	62.6	1,188.4	49.5	802.2	33.4
1.00	1	4,444.4	185.2	3,703.7	154.3	3,003.0	125.1	2,376.7	99.0	1,604.5	66.9

320 GB

Image Rec Recording Rate		Recording Picture Quality Mode									
		BASIC 10 KB		STANDARD 12 KB		MEDIUM 15 KB		HIGH 19 KB		SUPERIOR 28 KB	
(sec/imag)	(imag/sec)	Hours	Days	Hours	Days	Hours	Days	Hours	Days	Hours	Days
0.02	60	148.1	6.2	123.5	5.1	100.1	4.2	79.2	3.3	53.5	2.2
0.03	30	296.3	12.3	246.9	10.3	200.2	8.3	158.4	6.6	107.0	4.5
0.10	10	888.9	37.0	740.7	30.9	600.6	25.0	475.3	19.8	320.9	13.4
0.20	5	1777.8	74.1	1481.5	61.7	1201.2	50.1	950.7	39.6	641.8	26.7
0.33	3	2963.0	123.5	2469.1	102.9	2002.0	83.4	1584.5	66.0	1069.7	44.6
0.50	2	4444.4	185.2	3703.7	154.3	3003.0	125.1	2376.7	99.0	1604.5	66.9
1.00	1	8888.9	370.4	7407.4	308.6	6006.0	250.3	4753.4	198.1	3209.0	133.7

NOTE: Record duration times are based on actual tests. Performance may vary depending on specific installations and use. Audio recording requires 8 KB per second (or 0.7 GB per day) for data storage.